

Notice of Allowability**Application No.**

09/504,896

Applicant(s)

PICHE ET AL.

Examiner

ARMANDO RODRIGUEZ

Art Unit

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to February 5, 2004.
2. ☒ The allowed claim(s) is/are 1-3 and 8-17.
3. ☒ The drawings filed on 16 February 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>10-22-2004</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Response to Amendment

Claims 1-3,8-17 are pending.

Claims 4-7,18-20 have been canceled.

The 356 USC 102 rejection of claims 1-3,8-10,12,13,15,16 has been withdrawn based on applicant's amendment and arguments filed on February 5, 2004.

The 356 USC 103 rejection of claims 4-7 has been withdrawn based on applicant's amendment and arguments filed on February 5, 2004.

Claims 11,14 and 17 have been rewritten in independent form including the allowable subject matter, as described in the office action mailed on August 5, 2003.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with James Anglehart on October 22,2004.

The application has been amended as follows:

In claim 1 line 7 before semicolon, insert – to provide a dual wavelength operation --

Allowable Subject Matter

Claims 1-3,8-17 are allowed.

Art Unit: 2828

Regarding claims 1-3, 8-10,12,13,15 and 16,

After reviewing applicant's amendment, arguments and conducting an updated search none of the cited prior arts alone or in combination discloses the claimed method for generating dual wavelength laser pulses in a ring laser cavity having the recited steps of independent claim 1, as aligning elements making up the laser cavity for maximum continuous wave laser output and in particular providing at least one of a defect located near an end facet and a defect located at an end facet to provide dual wavelength operation and setting at least one of the elements into a misaligned position to achieve passive mode-locked operation of the semiconductor laser, where the recited term "setting" as defined by applicant, on page 9 of the Remarks filed on February 5, 2004, implies that the misalignment is permanent or not temporary.

Regarding claim 11,

After reviewing applicant's amendment, arguments and conducting an updated search none of the cited prior arts alone or in combination discloses the claimed method for generating laser pulses having the recited steps of independent claim 11, as aligning elements making up the laser cavity for maximum continuous wave laser output and in particular misaligning at least one mirror to favor amplification of wavelengths shorter than the at least one center wavelength to achieve passive mode-locked operation of the semiconductor laser.

Regarding claim 14,

After reviewing applicant's amendment, arguments and conducting an updated search none of the cited prior arts alone or in combination discloses the claimed method

Art Unit: 2828

for generating laser pulses having the recited steps of independent claim 14, as aligning elements making up the laser cavity for maximum continuous wave laser output and in particular misaligning at least one lens by shifting the lens to introduce color aberration to favor amplification of wavelengths shorter than the at least one center wavelength to achieve passive mode-locked operation of the semiconductor laser.

Regarding claim 17,

After reviewing applicant's amendment, arguments and conducting an updated search none of the cited prior arts alone or in combination discloses the claimed method for generating laser pulses having the recited steps of independent claim 17, as aligning elements making up the laser cavity for maximum continuous wave laser output and in particular misaligning at least one output coupler to favor amplification of wavelengths shorter than the at least one center wavelength to achieve passive mode-locked operation of the semiconductor laser.

Conclusion

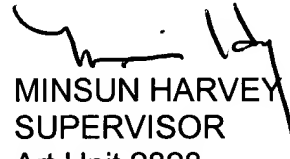
Any inquiry concerning this communication or earlier communications from the examiner should be directed to ARMANDO RODRIGUEZ whose telephone number is 571-272-1952. The examiner can normally be reached on 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MINSUN HARVEY can be reached on 571-272-1835. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2828

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


ARMANDO RODRIGUEZ
Examiner
Art Unit 2828


MINSUN HARVEY
SUPERVISOR
Art Unit 2828

AR/MH